



PART – C

Answer **any five** of the following. **Each** question carries **2** marks. **(5×2=10)**

- 17. a) Can Maxwell-Boltzmann statistics be applied to electron gas ? Explain.
- b) Does the fermi energy depend on temperature ? Explain.
- c) Can matter waves travel faster than light ? Explain.
- d) Does the concept of Bohr orbit violate the uncertainty principle ? Explain.
- e) Is there a coriolis force near equator ? Explain.
- f) The presence of water vapour in atmosphere is important. Justify.
- g) Does the band gap of nanoparticles increase with decrease in particle size ? Explain.
- h) Graphene is the strongest material. Justify.

